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 TI Ceramic binding compositions and method for binding ceramics  
 IN Natsui, Tetsuaki  
 PA Asahi Glass Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 12 pp.  
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 DT Patent  
 LA Japanese  
 IC ICM C09J001-02  
 ICS C03C014-00; C09J005-00; C09J005-06  
 CC 57-2 (Ceramics)  
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PI	JP 03192176	A2	19910822	JP 1989-329722	19891221
	JP 2734147	B2	19980330		
PRAI	JP 1989-329722		19891221		

# CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP	03192176	ICM	C09J001-02
		ICS	C03C014-00; C09J005-00; C09J005-06

AB The compns. comprise binding component 10-50, and ceramic aggregate (e.g., **cordierite**) 50-90 weight parts. The binding component contains **alkali** metal **silicate** (mainly **water** glass) 80-85, and amorphous silica powder (particle diameter  $\leq 0.1 \mu\text{m}$ ) 5-20 weight%. Addnl., appropriate amount of **water** is added to the composition to form a paste having viscosity 103-106 P at shear strength 10 s-1 for joining. The binding is carried out by filling the composition in the seam (0.5-5 mm) of 2 adjacent ceramic members (e.g., porous **cordierite** filter plates), and heating at 400-1200° for hardening. Optionally, the composition can be pre-extruded to form sheet shapes, then arranged in the seam for joining.

ST binding compn ceramic **water** glass; **cordierite** filter plate binding compn

IT Ceramic materials and wares  
 (binding of, to ceramics, **water** glass-amorphous silica-based binders containing ceramic aggregates for)

IT Filters and Filtration apparatus  
 (**cordierite**, binders for, compns. of **water** glass-amorphous silica-based)